

FORT SMITH DOWNTOWN TRAFFIC AND TRUCK STUDY



Working Group Meeting: May 23, 2019

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AGENDA

1. Opening Remarks
2. Summary of Public Engagement
3. Needs Assessment Results
4. Study Goals and Performance Measures
5. Preliminary Framework for Alternatives
6. Next Steps



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PUBLIC ENGAGEMENT

Public Open House

- Tuesday, February 26th, 2019
- River Park Events Building
- Over 30 attendees

Stakeholder Interviews

- February 27, 2019
- Met with representatives of 9 organizations
- Asked a series of questions appropriate to their organization

Public Feedback Surveys

- On-line surveys prepared for general public and trucking industry
- Made available online between March 28, 2019 and April 17, 2019
- Trucking industry survey distributed using stakeholder information
- 4 open-ended questions and 10 multiple choice
- 560 respondents to the online survey



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KEY FINDINGS FROM PUBLIC FEEDBACK

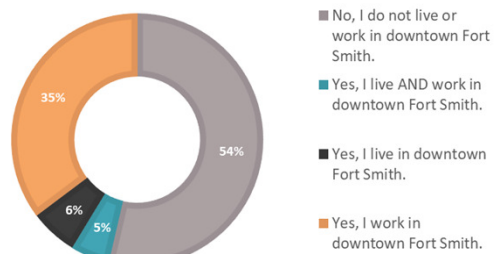
- Safety issues exist along Garrison Avenue, including vehicles running red lights (particularly near the US 64 bridge) and unsafe pedestrian crossings
- Local truck industry representatives share concern that designated truck routes or roadways critical to their business would be modified in such a way that would cause them significant financial burden
- Congestion and potential safety conflicts exist along Garrison Avenue at intersections where left turns are unprotected or not signalized
- Non-local freight truck drivers often do not follow local truck route designations or have difficulty routing to their destination using the most efficient, logical path along the truck routes.
- Truck routes are not designed for ease of access.



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SURVEY QUESTIONS AND RESPONSES

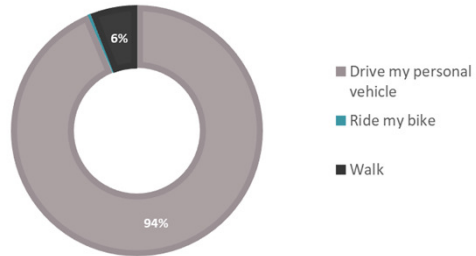
Question 1: Do you live and/or work in downtown Fort Smith?



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SURVEY QUESTIONS AND RESPONSES

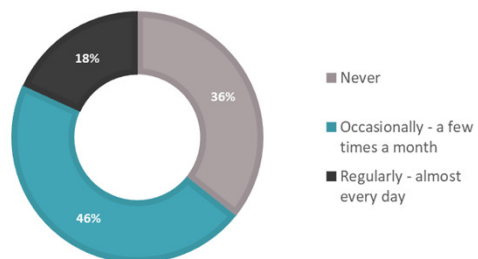
Question 2: How do you typically travel within downtown Fort Smith?



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SURVEY QUESTIONS AND RESPONSES

Question 3: How often do you walk, jog, ride a bike in downtown Fort Smith?

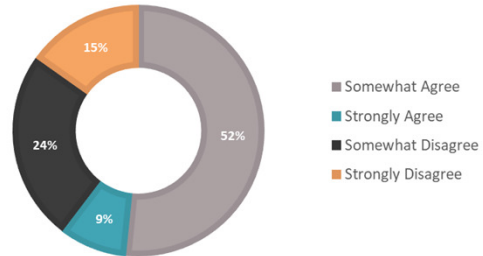


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SURVEY QUESTIONS AND RESPONSES

Question 4: Agree or Disagree?

a) Traffic lights in downtown are well timed and promote smooth traffic flow.

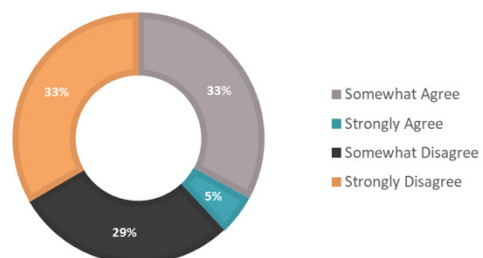


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SURVEY QUESTIONS AND RESPONSES

Question 4: Agree or Disagree?

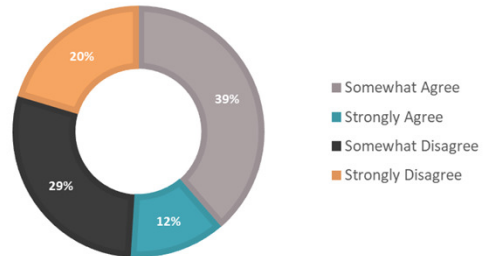
b) Drivers obey traffic lights and signage throughout downtown.



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SURVEY QUESTIONS AND RESPONSES

Question 4: Agree or Disagree?
c) There are a sufficient number of turn lanes throughout downtown.

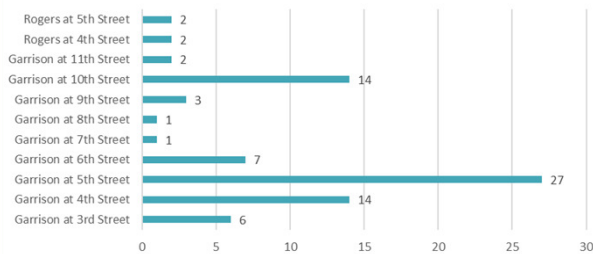


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SURVEY QUESTIONS AND RESPONSES

Question 4: Agree or Disagree?
d) Where would you suggest additional turn lanes in downtown Fort Smith?
(Question only prompted if respondent answered disagree in the question above)

Top Intersections Mentioned for Question 4d



205 responses were given for this question. Respondents suggested adding turn lanes at many intersections along Garrison Avenue, specifically at 4th, 5th and 10th Street. Many respondents (85) specified left turn lanes in their suggestions. 32 respondents suggested adding a turn lane for the full length of Garrison in the downtown area. Parking will be discussed as part of the framework for alternatives.

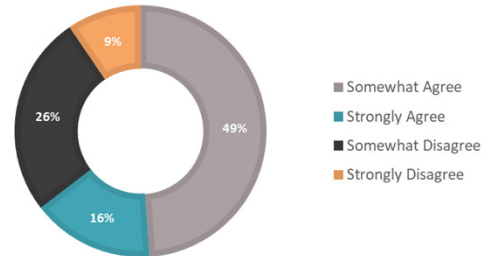


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SURVEY QUESTIONS AND RESPONSES

Question 4: Agree or Disagree?

e) When making turns in downtown, it is easy to see oncoming traffic and to safely make the turns.



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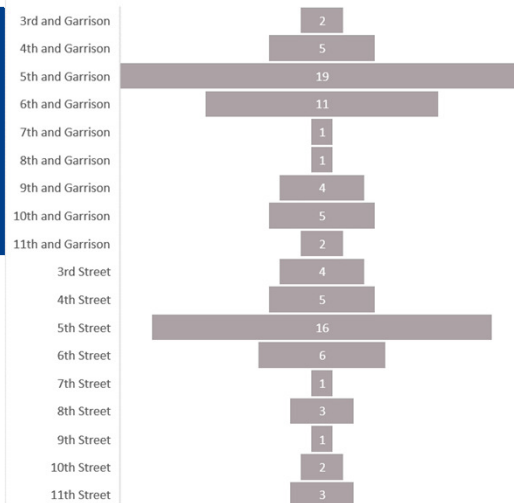
SURVEY QUESTIONS AND RESPONSES

Question 4: Agree or Disagree?

f) Where do you have difficulties making turns or seeing oncoming traffic when you're trying to make a turn? (Question only prompted if respondent answered disagree in the question above)

164 comments were received for this question. The intersection at 5th Street and Garrison Avenue, and 5th Street in general, is noted as a troublesome area for making turns. Overall, Garrison Avenue was mentioned in 87 comments.

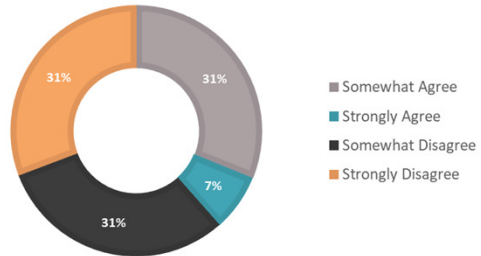
Top Intersections Mentioned for Question 4f



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SURVEY QUESTIONS AND RESPONSES

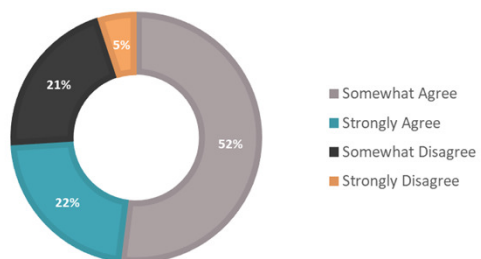
Question 4: Agree or Disagree?
g) Roads in downtown Fort Smith are in good condition



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SURVEY QUESTIONS AND RESPONSES

Question 4: Agree or Disagree?
h) Signage and traffic signals in downtown are easy to locate, read, and understand.

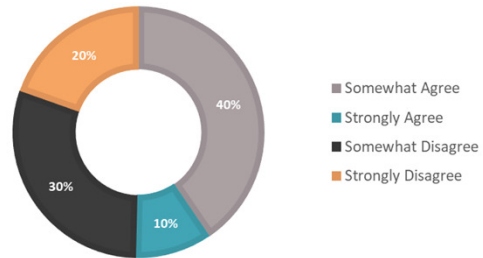


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SURVEY QUESTIONS AND RESPONSES

Question 4: Agree or Disagree?

i) I feel comfortable and safe when walking, jogging, or biking in downtown Fort Smith.

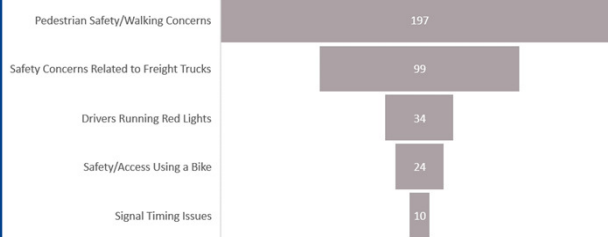


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SURVEY QUESTIONS AND RESPONSES

Question 5: Please describe your travel experience in downtown Fort Smith.

Most Mentioned Topics/Issues for Question 5



448 responses were received for this question. Safety was a reoccurring concern in the feedback received. Concerns related to pedestrian safety and walking were mentioned roughly twice as much as the next most mentioned topic. Again, reoccurring themes that were noted in relation to pedestrian safety include drivers running red lights or turning right while pedestrians have the signal to walk

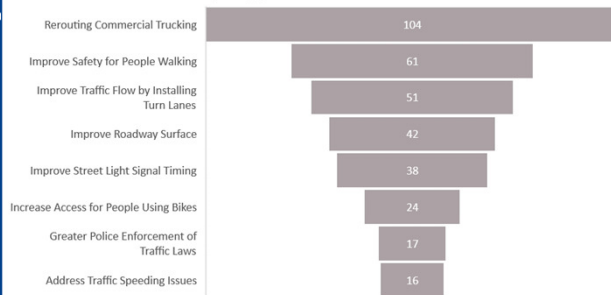


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SURVEY QUESTIONS AND RESPONSES

Question 6: What traffic improvements would you like to see in downtown Fort Smith?

Top Suggestions for Question 6



389 responses were received for this question. Comments related to commercial truck traffic received the most comments. Feedback regarding commercial truck traffic was related to recommendations about improving safety for people walking, improving traffic flow, and improving roadway conditions in downtown Fort Smith. The intersection at 5th and Garrison was called out specifically as needing repair.

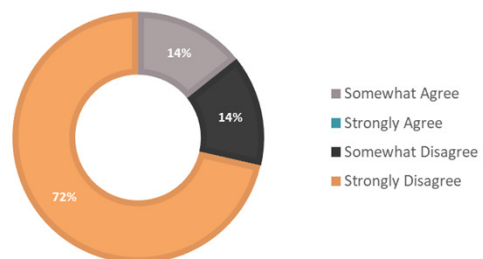


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TRUCKING INDUSTRY SURVEY QUESTIONS AND RESPONSES

Question 1: Agree or Disagree?

a) Signage for truck routes is easy to find and understand in downtown Fort Smith.

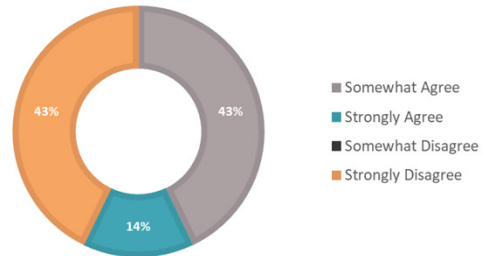


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TRUCKING INDUSTRY SURVEY QUESTIONS AND RESPONSES

Question 1: Agree or Disagree?

b) It is easy for truck drivers to find and access our facilities in Fort Smith while also following designated truck routes.

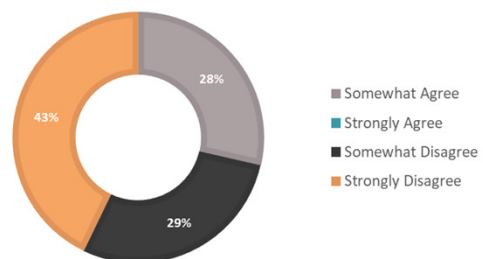


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TRUCKING INDUSTRY SURVEY QUESTIONS AND RESPONSES

Question 1: Agree or Disagree?

c) Truck drivers can easily maneuver the roadways along the area's truck routes.



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TRUCKING INDUSTRY SURVEY QUESTIONS AND RESPONSES

Question 2: Please describe the common experiences that truck drivers associated with your company have when they travel through downtown Fort Smith.

- 3 noted they do not experience any issues
- 3 noted issues with navigating the left turn from Garrison to 5th Street
- Other difficult turning movements included
 - Kelley Highway/Midland Boulevard
 - 5th Street/A Street
- Truck signage is minimal and made it difficult to find truck routes.



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TRUCKING INDUSTRY SURVEY QUESTIONS AND RESPONSES

Question 3: What are some potential traffic improvements you would like to see in downtown Fort Smith, particularly those related to truck traffic?


- Protected left turn signals at Garrison & 5th Street
- More visible truck signage
- General road/pothole repairs and better lighting
- Move the truck route to 11th Street
- Better synchronization of traffic signals
- Widening turning radii at intersections



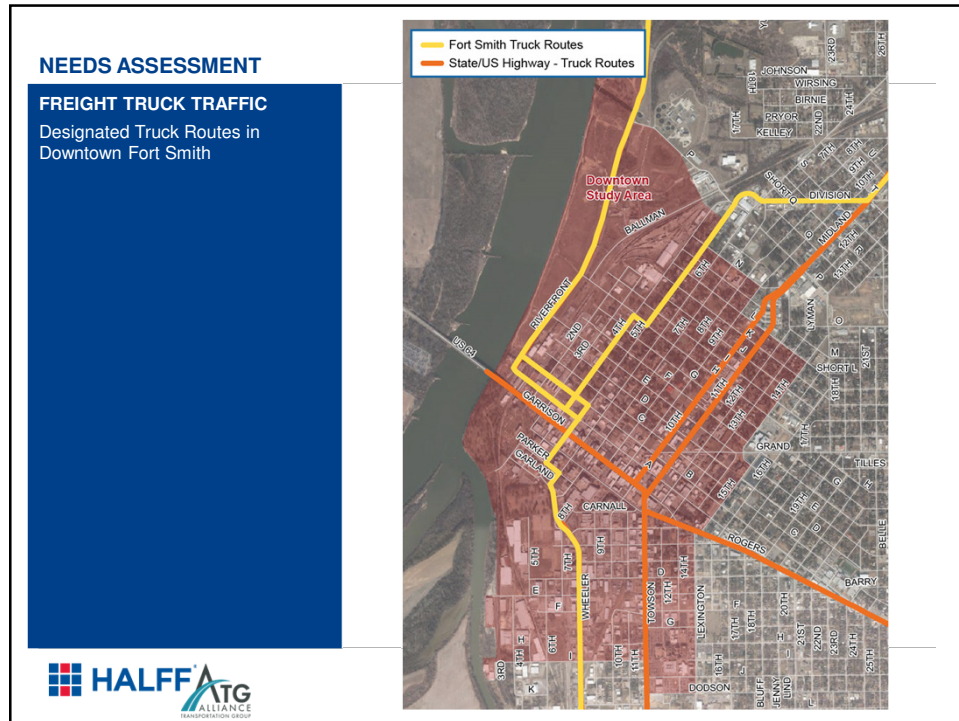
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|---|--|
| <p>AGENDA</p> <ol style="list-style-type: none"> 1. Opening Remarks 2. Summary of Public Engagement 3. Needs Assessment Results 4. Study Goals and Performance Measures 5. Preliminary Framework for Alternatives 6. Next Steps <p style="text-align: right;">  </p> | |
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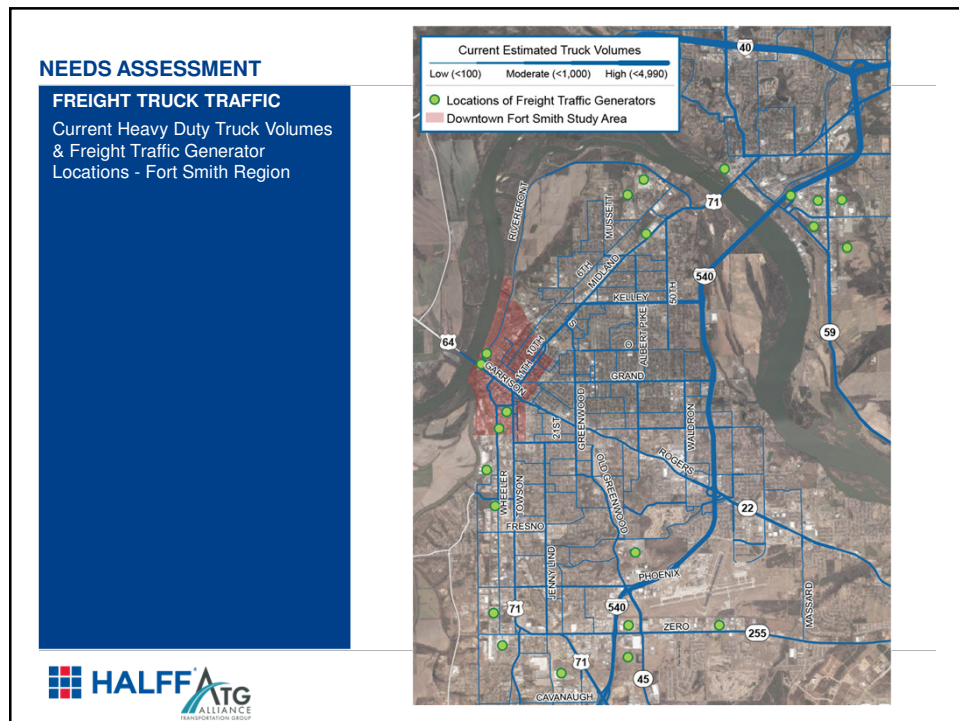
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| | |
|---|--|
| <p>NEEDS ASSESSMENT</p> | |
| <p>Freight Truck Traffic</p> <ul style="list-style-type: none"> • Understand Origins and Destinations of Truck Traffic traveling through downtown Fort Smith • Locations of freight traffic generating businesses <p>Vehicular Roadway Performance</p> <ul style="list-style-type: none"> • Congestion • Travel Time Reliability <p>Safety</p> <ul style="list-style-type: none"> • Vehicular Crash Data <ul style="list-style-type: none"> •Crashes involving Pedestrians and Cyclists •Crashes involving Heavy Duty Freight Trucks <p>Public Feedback</p> | |
|  | |

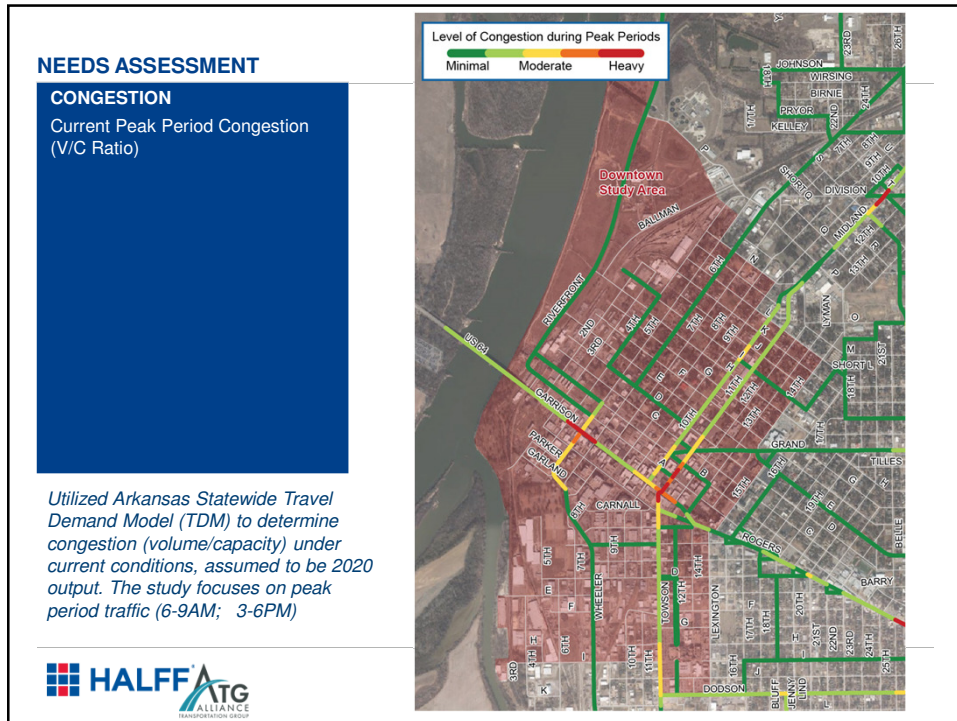
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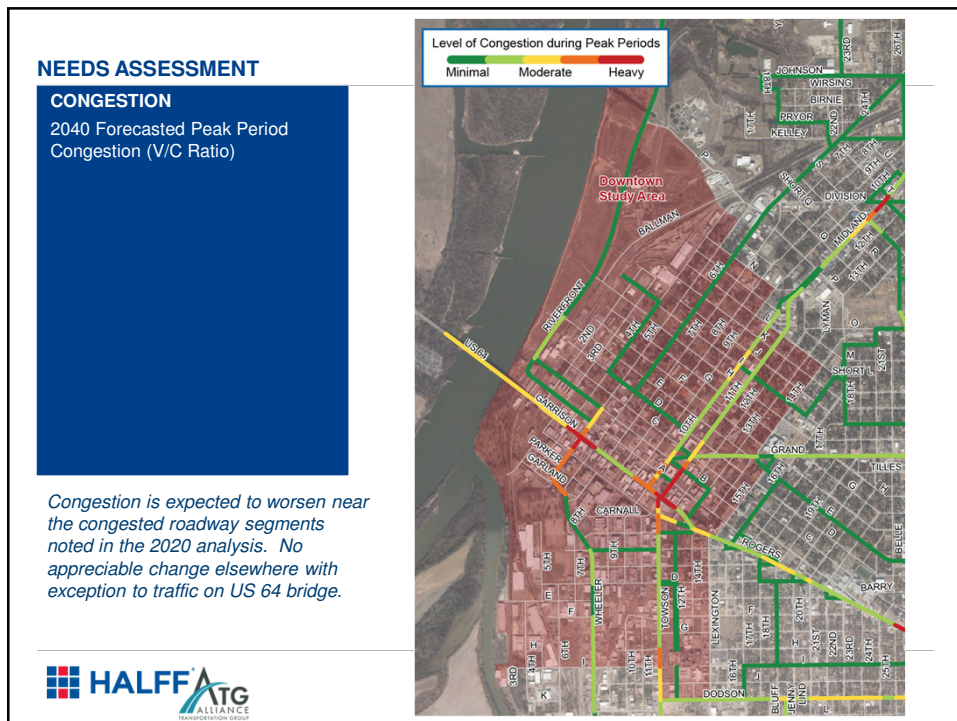
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NEEDS ASSESSMENT

TRAVEL TIME RELIABILITY

Unreliable roadway Segments –
NPMRDS Level of Travel Time
Reliability (LOTTR)

| Roadway (From-To) | Direction of Travel | LOTTR Value | | | |
|--|---------------------|-------------|----------|-------|-----------------|
| | | 6-10AM | 10AM-4PM | 4-8PM | Weekend 6AM-8PM |
| Garrison Ave. (US 64 Bridge to N. 11 th St.) | Westbound | 1.45 | 1.53 | 1.53 | 1.45 |
| Garrison Ave. (N. 11 th St. to Towson Rd.) ¹ | Westbound | 1.38 | 1.31 | 1.55 | 1.43 |
| Towson Ave. (at the approach to the Garrison Ave. intersection) | Northbound | 1.70 | 1.60 | 1.71 | 1.55 |

3 unreliable segments (LOTTR ratio greater than 1.5) were identified. LOTTR ratios were determined for 2018 travel time data, which includes roughly 230,000 observations. This information is provided as part of FHWA's National Performance Management Research Data Set (NPMRDS).



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NEEDS ASSESSMENT

SAFETY

Annual Number of Crashes –
Downtown Fort Smith & City of Fort
Smith (2015-2018)

| Year | Total Crashes for Fort Smith | % Change | Total Crashes for Downtown Only | % Change |
|------|------------------------------|----------|---------------------------------|----------|
| 2015 | 2,839 | - | 339 | - |
| 2016 | 3,221 | 13% | 360 | 6% |
| 2017 | 2,880 | -11% | 343 | -5% |
| 2018 | 2,851 | -1% | 363 | 6% |

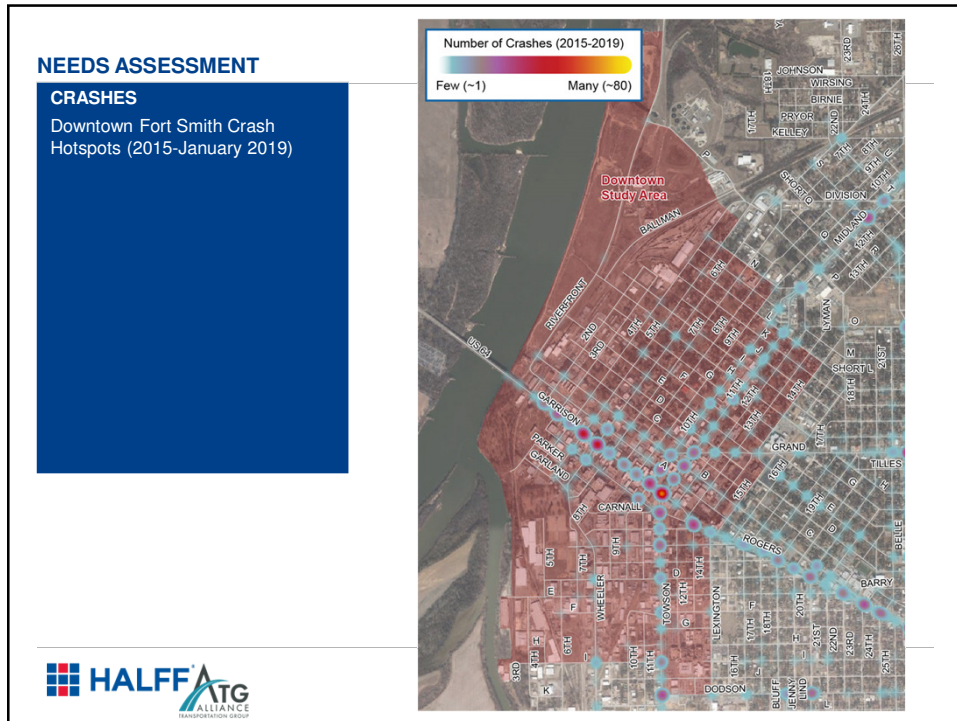
Downtown Fort Smith Intersections
where the most crashes occur
(2015-2018)

| Intersection | Total Crashes |
|--|---------------|
| 11th St & Towson Ave. / Garrison Ave. | 52 |
| 6th St. / Garrison Ave. | 42 |
| Rogers Ave. / Garrison Ave. / 14th St. | 34 |
| 10th St. / Garrison Ave. | 31 |
| 5th St. / Garrison Ave. | 29 |
| Dodson Ave. / Towson Ave. | 28 |

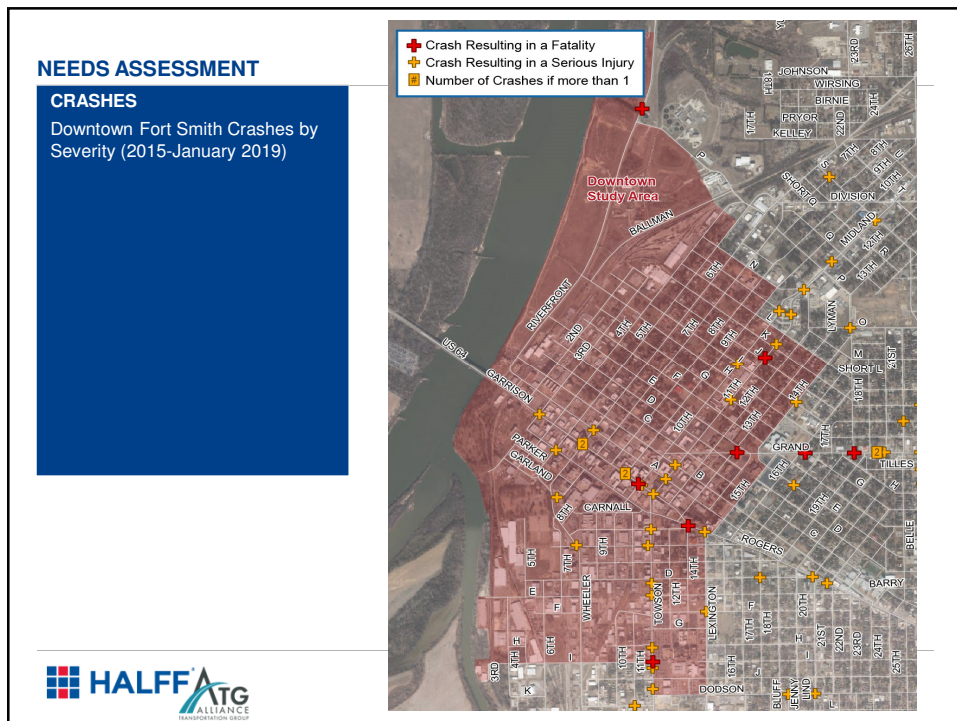
The team analyzed crash data provided by the Fort Smith Police Department for the past four years to determine location, severity, and type of crashes.



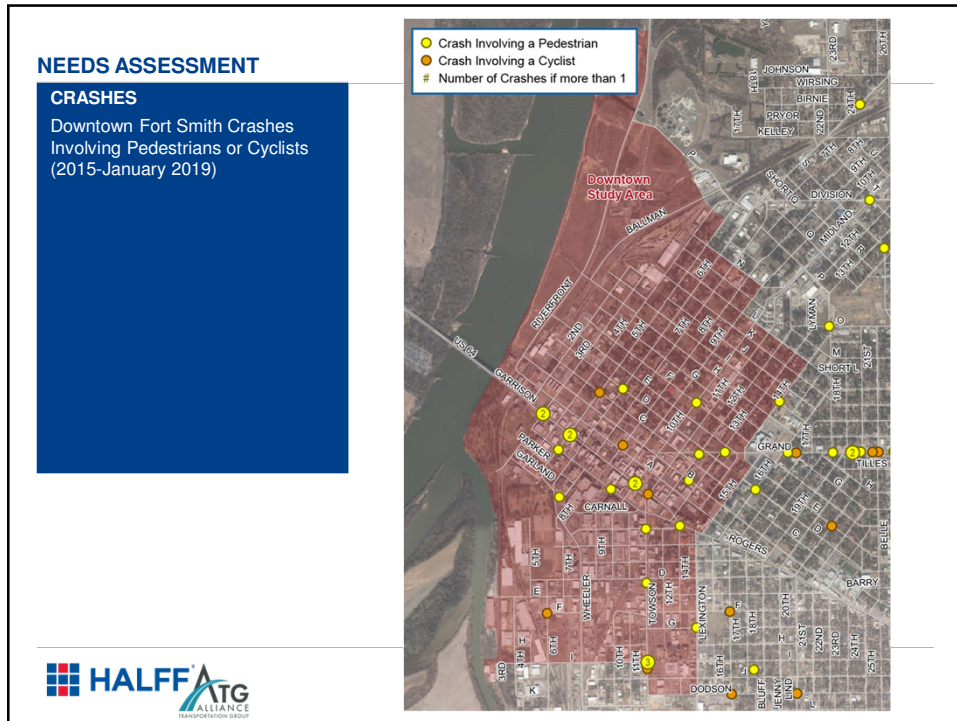
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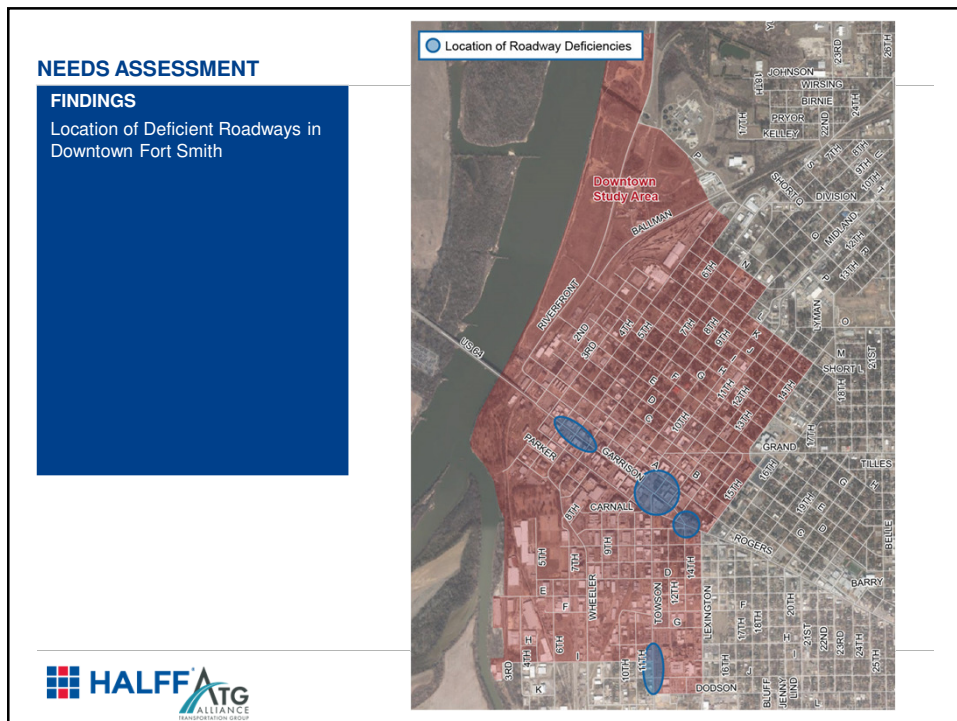
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STUDY GOALS AND PERFORMANCE MEASURES

- **Goal 1: Safety.** There are multiple streets and modes that travel into and through downtown, and it is critical that their convergence allows for continuous safe and orderly movements.
- **Goal 2: Develop a Balanced Solution.** Per the Propelling Downtown Forward Plan, the preferred solution for a mitigating the effects of downtown truck traffic should support both the local business freight needs in the downtown area and the vibrancy and ongoing placemaking efforts of downtown.
- **Goal 3: Economic Vitality.** Downtown is the economic center of the region, and its transportation system should be designed to support the local economy through the efficient and safe movement of goods and services.
- **Goal 4: Preserve Downtown Character.** Downtown is also the cultural center of the region and is emerging as a popular location for local businesses, residents, entertainment, and community events. As a popular destination, the local transportation system should be designed to support its vibrancy while not detracting from its special environment and placemaking appeal.



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ALIGNING WITH ARDOT GOALS & PERFORMANCE MEASURES

Goal: Safety

Study Context: Consider vehicular and non-vehicular safety is critically important in developing alternatives that involve directing traffic and truck traffic movements and volumes

Safety Performance Measurements & Targets (Statewide) – ArDOT/Frontier MPO

| SAFETY PERFORMANCE MEASUREMENT | 5-Year Rolling Averages | |
|---|-------------------------|--------------|
| | Baseline | ArDOT Target |
| Number of Fatalities | 574 | 555 |
| Rate of Fatalities (per 100 VMT) | 1.73 | 1.66 |
| Number of Serious Injuries | 3305 | 3,470 |
| Rate of Serious Injuries (per 100 VMT) | 9.92 | 10.42 |
| Number of Non-motorized Fatalities & Serious Injuries | 142 | 149 |

Application to Alternative Design: Alternatives that include safety enhancements and design elements should be favored and should improve statewide safety statistics.



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ALIGNING WITH ARDOT GOALS & PERFORMANCE MEASURES

Goal: Travel Time Reliability

Study Context: Ensuring predictable travel times, with minimal occurrences of congestion, is important to supporting the local economy, enhancing productivity, and protecting quality of life.

Travel Time Reliability Performance Measurements & Targets (Statewide) – ArDOT/Frontier MPO

| TRAVEL TIME RELIABILITY PERFORMANCE MEASUREMENT | 5-Year Rolling Averages | | |
|--|-------------------------|-------------------|-------------------|
| | Baseline | ArDOT 2020 Target | ArDOT 2022 Target |
| Percent of Person-Miles Traveled on the Interstate that are Reliable | 94.2-95.4% | 91% | 89% |
| Percent of Person-Miles Traveled on the non-Interstate NHS that are Reliable | 86.2-95.7% | N/A | 90% |

Application to Alternative Design: Alternatives should include strategies that address any related congestion issues, emphasize efficient and direct traffic movements, support multimodal transportation alternatives, and result in improved travel speeds to improve travel time for all users.



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ALIGNING WITH ARDOT GOALS & PERFORMANCE MEASURES

Goal: Freight Reliability

Study Context: Efficient, direct routes that allow for attractive travel speeds and dependable trip times is essential to supporting the local freight industry and the logistics of moving goods to and from market.

Travel Time Reliability Performance Measurements & Targets (Statewide) – ArDOT/Frontier MPO

| FREIGHT RELIABILITY | 5-Year Rolling Averages | | |
|--|-------------------------|----------------------|----------------------|
| | Baseline | ArDOT 2020 Target | ArDOT 2022 Target |
| PERFORMANCE MEASUREMENT | | | |
| Truck Travel Time Reliability on the Interstate System | 1.20-1.41 | 1.45 | 1.52 |

Application to Alternative Design: Alternatives should include strategies that improve the logistics, efficiencies, and capacities of local freight routing and enhance network connections to intermodal facilities, regional freight routes, and the interstate system.



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ALIGNING WITH ARDOT GOALS & PERFORMANCE MEASURES

Goal: Infrastructure Condition – Pavement

Study Context: Good pavement condition is important to safely accommodate high volumes of general and truck traffic. Furthermore, heavy traffic and freight volumes can deteriorate roadways making them unsafe, unpleasant, and less dependable for motorists and adjacent property owners.

Pavement Condition Performance Measurements & Targets (Statewide) – ArDOT/Frontier MPO

| PAVEMENT CONDITION | 5-Year Rolling Averages | | |
|---|-------------------------|----------------------|----------------------|
| | Baseline | ArDOT 2020 Target | ArDOT 2022 Target |
| PERFORMANCE MEASUREMENT | | | |
| Percent of Interstate pavements in Good condition | 77% | N/A | 79% |
| Percent of Interstate pavements in Fair condition | 4% | N/A | 5% |
| Percent of non-Interstate NHS pavements in Good Condition | 52% | 48% | 44% |
| Percent of non-Interstate NHS pavements in Fair Condition | 8% | 10% | 12% |

Application to Alternative Design: Alternatives for truck routing should consider using roads that are designed or can be upgraded to adequately handle the size, weight, and movements of truck traffic.



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PRELIMINARY FRAMEWORK FOR ALTERNATIVES

Working Group Feedback on the following topics:

- Parking
- Partial Closure of Streets
- Potential Impacts to Existing Buildings and Infrastructure
- Weighting of Goals



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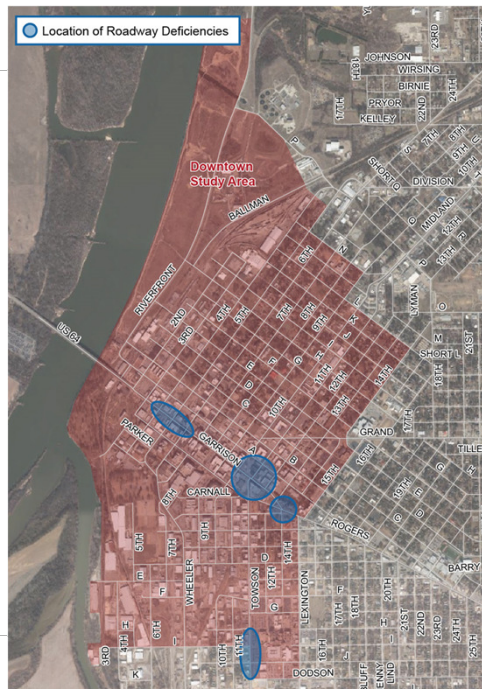
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ALTERNATIVE DEVELOPMENT & ANALYSIS

CONSIDERATIONS:

- Consider Goals & Objectives
- Consider Public Input
- Address deficiencies
- Evaluate Alternatives



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QUESTIONS?

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